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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,560	02/11/2004	Franck Abelard	PF030038	2786
7590 12/01/2009				
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EXAMINER				
BROWN, CHRISTOPHER J				
ART UNIT		PAPER NUMBER		
2439				
MAIL DATE		DELIVERY MODE		
12/01/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/776,560

**Applicant(s)**

ABELARD ET AL.

**Examiner**

CHRISTOPHER J. BROWN

**Art Unit**

2439

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant argues that Unger does not teach not storing a key value if the value has not changed.

Examiner points to Unger Figure 3, where keys are stored only if different (odd, even) and the packets between them do not store a key.

It is not explicitly stated in Unger that two ECM packets contain the same key as stated in the amendment to claim 1.

However the applicants specification, page 2, in the background of the invention states that ECMs are transmitted every 100ms and their content is changed every 10 seconds. Thus it is well known that ECMs contain the same key for a period of time, thus a key of one ECM packet is identical to the preceding ECM packet.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 3-5, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger US 2004/0062398 in view of Chen US 2004/0083177

As per claim 1, 16 Unger teaches recording scrambled digital data comprising the steps consisting of receiving a scrambled digital data stream [0022]. Unger teaches identifying in said data stream a control packet containing at least one key for descrambling at least a part of the data of the stream (ECM) [0022]. Unger teaches storing said control packet in a table (keys stored in a table) [0024]. Unger teaches recording the data stream and the table on a data storage medium (content stored in content store) [0019]. Unger teaches the data stream received in step comprises a plurality of control packets containing at least one descrambling key, wherein the storage step is carried out only if the control packet identified in step is not already stored in said table (multiple packets have ECM and all are different with respect to a function of time or packet number) [0022], [0026].

Unger does not explicitly state that the encryption keys are of different values.

Chen teaches a series of ECM messages to encrypt a stream of data, where each key included in an ECM message is a different value key [0051], and may be stored [0050], [0051], [0053].

It would have been obvious to one of ordinary skill in the art to use keys that are all different in the system of Chen with the encryption system of Unger because it is well known and further enhances the security of the encrypted stream.

As per claim 3, Unger teaches an index indicating the position of the control packet in the data stream is moreover stored in the table (ECM as a function of time or as a function of packets received) [0025], [0026].

As per claims 4, and 5 Unger teaches the index comprises a serial number of the control packet with respect to the first packet of the data stream recorded (packet # or time index) [0025], [0026] Fig 3.

As per claim 14 Unger teaches storing step further comprises forming said table of keys in a sequence related to scrambling changes in the received stream (Fig 3).

As per claim 15 Unger teaches storing keys [0024].

Chen teaches the keys are non-duplicate values [0051].

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER J. BROWN whose telephone number is (571)272-3833. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571)272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher J Brown/  
Primary Examiner, Art Unit 2439

11/23/09